### **REMARKS**

Claims 1-7, 9-19 and 21-32 are pending in this application. By this Amendment, claims 1, 19 and 32 are amended. Support for the amended claims may be found in paragraphs [0007] [0009] and [0057], for example. No new matter is added. Reconsideration and allowance of this application are respectfully requested.

## **CLAIM OBJECTIONS**

Claims 1-7, 9-19 and 21-32 are objected to due to informalities. Specifically, the Examiner asserts that "populating a loading map with fuel bundles" is unclear.

Applicants submit that claims 1 and 19 have been amended, as suggested by the Examiner, to obviate the objection. Withdrawal of the objection is respectfully requested.

# CLAIM REJECTION-35 U.S.C § 112

Claims 1-7, 9-19 and 21-32 are rejected under 35 U.S.C § 112, second paragraph, as being incomplete for omitting essential steps. Specifically, the Examiner states that "[t]he omitted steps are: Applicant's claim preamble sets forth the recovery of nuclear fuel but the rest of Applicants' claims fail to provide any further steps in performing the recovery of nuclear fuel".

Applicants submit that independent claims 1, 19 and 32 adequately recite a method of recovering nuclear fuel from a fuel pool by employing a graphical user interface that allows a user with the capability to selectively populate a loading map which represents fuel bundles residing in at least one fuel pool. For example, a computer processor may include a memory storing at least one fuel pool database. The fuel pool database includes the list of at least portions of the fuel bundles residing in the fuel pool, and the user may select which of these fuel bundles to use in creating the loading map.

Further, the Examiner asserts that Applicants' claim preamble sets forth the recovery of nuclear fuel but the rest of Applicants' claims fail to provide any further steps in performing the recovery of nuclear fuel". However, the statement by the Examiner appears inconsistent with the Examiner's previous statement that a "preamble has no patentable weight". Thus, clarification is respectfully requested.

Reconsideration and withdrawal of the rejection are respectfully requested.

# CLAIM REJECTION-35 U.S.C § 102

Claims 1, 19 and 32 are rejected under 35 U.S.C § 102(b) as being anticipated by Sadaoka et al. ("Sadaoka") U.S. Patent 4,988,476. This rejection is respectfully traversed.

#### I. Sadaoka

Sadaoka fails to disclose or suggest a method of facilitating recovery of nuclear fuel from a fuel pool, comprising, *at least*:

providing a graphical user interface that allows a user to selectively populate a loading map which represents fuel bundles residing in at least one fuel pool, wherein the graphical user interface includes one or more loading tools for aiding a user in selecting and moving a filtered fuel pool table to a reload fuel table.

as recited in claim 1.

Sadaoka discloses evaluating for deformations of a channel box of a fuel assembly in a nuclear reactor core in which deformations of the channel box which has been used for exposure. The evaluation to be deformed are estimated for a future exposure computation and process of data of core characteristics, data of material properties and shapes of channel boxes, data of initial deformations of the channel box, data of loading patterns and the like. Accordingly, the evaluation determines whether the estimated deformations are agreeable for reusing the channeled box in the future exposure, or not (Abstract).

However, Applicants submit that Sadoaka is completely silent with regard to "graphical user interface including one or more loading tools for aiding a user in selecting and moving a filtered fuel pool table to a reload fuel table", as recited in claim 1.

As shown in an example embodiment of the present invention, Fig. 3 illustrates a reloaded fuel pool table 200 populated by moving fuel bundles from a filtered fuel pool table 100 into the reloading fuel pool table 200. The reloading fuel pool table 200 further includes a set of tools 120 for aiding the user in selecting and moving the fuel bundles from the filtered fuel pool table 100 to the reload fuel pool table 200.

Because Sadoaka fails to disclose each and every feature of the claimed invention, it cannot provide a basis for a rejection under 35 U.S.C § 102. Accordingly, claim 1 is allowable. Withdrawal of the rejection is respectfully requested.

Claim 19 and 32 are also allowable for the similar reasons discussed above. Withdrawal of the rejection is respectfully requested.

### II. O'Sullivan

Claims 1-7, 9-19 and 21-32 are rejected under 35 USC § 102(b) for being anticipated by "MICROBURN-B2 to RETRAN-linking code" by Donald Hines and "CPW for Simulate-3" by Kevin O'Sullivan (hereinafter "O'Sullivan"). This rejection is respectfully traversed.

Applicants submit that O'Sullivan fails to disclose or suggest "providing a graphical user interface that allows a user to selectively populate a loading map which represents fuel bundles residing in at least one fuel pool, wherein the graphical user interface includes one or more loading tools for aiding a user in selecting and moving a filtered fuel pool table to a reload fuel table", as recited in claim 1.

Instead, O'Sullivan discloses linking codes to transfer necessary data so that an onset of transient, RETRAN-3d as modeling the same core with the same power distribution and feedback characteristics. Thus, O'Sullivan fails to disclose or even mention that the graphical user interfacing includes one or more loading tools that aids in selecting and moving a filter fuel pool table to a reload fuel pool table. Accordingly, claim 1 is allowable over O'Sullivan.

Claims 2-7 and 9-18 are allowable by virtue of their dependency on claim 1, and for the features recited therein. Withdrawal of the rejection is respectfully requested.

Claims 19 and 32 are allowable for similar reasons discussed above with respect to claim 1. Dependent claims 21-31 are allowable by virtue of their dependency on claim 19 and for the features recited therein. Withdrawal of the rejection is respectfully requested.

#### CLAIM REJECTIONS- 35 USC § 103

Claims 1, 2, 3, 19, 21, 22, 24, 25 and 32 are rejected under 35 USC § 103(a) as being unpatentable over Sadoaka in view of Tooney et al. ("Tooney"), US Patent 5,793,636. This rejection is respectfully traversed.

As discussed above, Sadoaka fails to disclose or suggest the claimed invention as found in claims 1 and 19, the independent claims from which the rejected claims depend. Further, Tooney fails to overcome the noted deficiencies of Sadoaka. Withdrawal of the rejection is respectfully requested.

### **CONCLUSION**

In view of the above, Applicant earnestly solicits reconsideration and allowance of all of the pending claims.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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